**INTERNAL REVENUE SERVICE**
NATIONAL OFFICE TECHNICAL ADVICE MEMORANDUM

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CASE-MIS No.: TAM-151556-03, CC:FIP:B04

Taxpayer's Name:
Taxpayer's Address:

Taxpayer's Identification No
Years Involved:
Date of Conference:

LEGEND:

Company =

State =

Holding =

X =

Year 1 =

Year 2 =

Year 3 =

Y =

Z =

a % =

b % =

c % =

d % =

e % =

f % =

g % =

h % =

i % =

j % =

k % =

l % =

ISSUE:

Whether, for the years involved, Company's statutory reserves for deferred variable annuity contracts were computed or estimated on the basis of recognized mortality or morbidity tables and assumed rates of interest for purposes of the definition of life insurance reserves under section 816(b)(1) of the Internal Revenue Code?

CONCLUSION(S):

Company's statutory reserves for deferred variable annuity contracts, to the extent of the reserves required by the Commissioners Annuity Reserve Valuation

Method (CARVM), were amounts "computed or estimated on the basis of recognized mortality and morbidity tables and assumed rates of interest," and therefore qualified as life insurance reserves under section 816(b)(1).

FACTS:

Company is a stock life and health insurance company organized under the laws of State. Company is a wholly owned subsidiary of Holding and joins with Holding in filing a life-nonlife consolidated return under section 1504(c) (2). Company's ultimate parent is X, a foreign corporation, which operates insurance businesses in several countries around the world. Company is X's principal operating subsidiary within the United States.

Company offers a broad range of insurance products, including fixed and variable life insurance and annuities, group life insurance, long term care insurance, accident and health insurance, and life and accident and health reinsurance.

During the years involved, more than 50 percent of Company's total reserves, for purposes of section 816, consisted of statutory reserves held in a separate account in connection with deferred variable annuity contracts.

Company began selling a type of variable annuity contract in Year 1. As its sale of variable annuities increased, Company added a number of additional types of variable annuity contracts to its product portfolio. Although there were certain differences among the variable annuity contracts offered by Company during the years involved, the contracts shared the following product features. These product features were also typical of variable annuity contracts currently being sold by other insurance companies.

Company issues its variable annuity contracts through a legally recognized separate account. In accordance with the insurance laws of State, assets maintained in the separate account are shielded from Company's general creditors, and all investment returns from such assets must be credited to, or charged against, the benefits provided under the variable annuity contracts, apart from the Company's charges against the separate account with respect to its mortality guarantees and investment management and administrative expenses. The separate account is registered with the Securities and Exchange Commission as a unit investment trust under the Investment Company Act of 1940, as amended. The separate account is divided into a number of subaccounts, each of which corresponds to one of the investment options offered under the variable annuity contracts. The assets of each subaccount are invested in a

particular “insurance-dedicated” mutual fund. Most of the mutual funds used for this purpose are managed by Y, an unrelated investment company. The contractholder determines how the annuity premium or accumulated contract value is allocated among the different subaccounts of Account A, and may change these allocations from time to time. When the contractholder directs that the annuity premium or accumulated contract value is allocated to a particular investment option, the purchase payments are converted into accumulation units for the corresponding subaccount. The number of accumulation units credited to the variable annuity contract is determined by dividing the purchase payments allocated to the subaccount by the current value of an accumulation unit for that subaccount. The accumulation value for the annuity contract is the sum of the values of all of the accumulated units of the subaccounts in which the contract is invested, reduced by certain contractual expense charges consisting of a mortality and expense charge, an investment management fee, an annual contract maintenance fee, and certain other administration charges. The contractholder assumes the investment risk associated with the separate account assets, as the value of the accumulation units credited to the variable annuity contract varies based on the investment experience of the underlying mutual funds, and Company does not guarantee the investment performance of the separate account assets.

Company’s variable annuity contracts contain certain permanent mortality-based guarantees, including guaranteed annuitization values and minimum guaranteed death benefits. Under the terms of the variable annuity contracts, on a select “Income Date,” the contractholder may apply the accumulation value (less incurred premium taxes, if any) to purchase one of several annuity payout options. The earliest Income Date that can be selected varies from two to five years, depending on the policy form. If no income date is selected, it will default to the later of the annuitant’s 85$^{th}$ birthday (first day of first calendar year after) or 10 years from the issue date. The annuity payout options include monthly annuity payments for life, monthly payments with minimum guaranteed payment periods, as well as other options. If no annuity option has been selected as of the Income Date, the accumulation value will be paid out over a term certain of 60 months. The contractholder may elect to receive annuity payments as either a fixed annuity or a variable annuity, or a combination of two, depending on the selected payout option. If the contractholder selects a fixed annuity, the dollar value of each fixed annuity payment is determined in accordance with contractually guaranteed monthly payments which are based on the 1983 IAM mortality table and the minimum guaranteed interest rate of 2 ½ percent per year. If the contractholder selects a variable annuity payout, the initial payments are determined by assuming that the accumulation units on which the annuity payments are based earn a 5 percent rate of return, but subsequent payments will vary depending on the actual investment returns of underlying subaccounts selected by the contractholder to fund the annuity payments. Although the dollar value of the payouts under the variable annuity option will vary over time, Company assumes a mortality risk with respect to this payment option because Company guarantees to make annuity payments based on a stated number of accumulation units over the contractholder’s actual life.

Prior to the select Income Date, Company's variable annuity contracts provide a cash surrender value which may be accessed by the contractholder through a partial or full withdrawal. Withdrawals or surrenders result in a cancellation of accumulation units. For withdrawals or surrenders in excess of a free partial withdrawal limit, Company may impose a surrender charge equal to a percentage of the requested withdrawal, depending on the number of years the contract has been in force. Except for the first

two years for which the variable annuity contract is in force, the scale of surrender charges provides that this charge is reduced by one percent at each policy anniversary, and is eliminated entirely once the contract has been in force for a requisite number of years. No surrender charges apply if the contractholder transfers funds among the available investment options.

Company's deferred variable annuity contracts also provide for a minimum guaranteed death benefit, generally equal to the greater of the net purchase payments, or premiums (less surrenders) contributed by the contractholder, or the contract's net surrender value. Company incurs a mortality risk with respect to this benefit because, at any time, Company's potential liability with respect to minimum guaranteed death benefits may exceed contract surrender values (generally due to a decline in the market value of the separate account assets).

Company's statutory reserves for deferred variable annuity contracts were required to satisfy the minimum reserve requirements of the Standard Valuation Law based on CARVM. The insurance laws of State incorporate the Standard Valuation Law, including the standard definition of CARVM, as follows:

> Reserves according to the commissioners annuity reserve valuation method for benefits under annuity … contracts, excluding any disability and accidental death benefits in such contracts, shall be the greatest of the respective excesses of the present value, at the date of valuation, of the future guaranteed benefits, including guaranteed nonforfeiture benefits, provided by such contracts at the end of each respective contract year, over the present value, at the date of valuation, of any future valuation considerations derived from future gross considerations, required by the terms of the contracts, that become payable prior to the end of such respective contract year. The future guaranteed benefits shall be determined by using the mortality table, if any, and the interest rate or rates specified in the contracts for determining guaranteed benefits. The valuation considerations are the portions of the respective gross considerations applied under the terms of the contracts to determine nonforfeiture values.

For the years involved, Company held separate account reserves for the deferred variable annuity contracts equal to the aggregate cash surrender values of the

underlying contracts. Beginning in Year 2, Company also established an additional supplemental reserve in its general account to take into account the risk that a death would occur and Company would have to pay a minimum guaranteed death benefit that exceeded the current cash surrender value for the policy. Company labeled the additional reserve for minimum guaranteed death benefits in Exhibit 8 of its annual statement as computed using the 1980 CSO mortality table and an assumed interest rate of 5.5 percent. In Year 3, Company obtained reinsurance for the net risk associated with the minimum guaranteed death benefit provision of its deferred variable annuity business, so that an additional reserve for minimum guaranteed death benefits was no longer carried in Year 3 or later years.

In the actuarial memorandum filed with insurance regulators in State in connection with its variable annuity contracts, Company described the reserve basis used to calculated reserves for its variable annuity contracts as follows:

> The Company currently maintains reserves for the policy as the greater of the contract generated cash surrender value or the CARVM reserve. This reserve is held in the separate account.
>
> In the event that poor investment results yielded a death benefit materially in excess of [its] statutory reserve described above, … Company would establish [a] term insurance reserve [in] the general account for the excess.

Despite this description of its reserve methodology in the actuarial memorandum, Company contends that it did not, in fact, calculate the separate account reserves for its deferred annuity contracts using the CARVM reserve methodology, and that such separate account reserves exceeded the reserves that would have been determined if the CARVM reserve methodology had actually been used. In this regard, Company explains the relationship of its separate account reserves and the reserves required by CARVM as follows:

> [Company] … did not hold CARVM reserves for the separate accounts.
>
> [Company's] … actuaries concluded that the cash surrender value reserves satisfied the minimum reserve requirements of the Standard Valuation Law based on CARVM. The [deferred variable annuity] contracts were specifically designed to ensure that the cash surrender value ("CSV") reserves would always exceed a CARVM reserve. This was accomplished by setting surrender charges in such a way that the present value of every future benefit scenario (using assumptions permissible under CARVM that would yield the minimum reserve under the Standard Valuation Law) was always less than the CSV.

> Although CARVM reserves were never computed by [Company's] … actuaries, hypothetical CARVM calculations were made to demonstrate mathematically that the CSV reserves satisfied the Standard Valuation Law.

Company contracted with Z, an unrelated third party, to administer Company's variable annuity business, maintain the necessary data bases, and compile the current cash surrender values. For the years involved, Company determined its separate account reserves with respect to the deferred annuity contracts based on information regarding the current aggregate cash surrender values on the underlying contracts furnished by Z. In 1998, following the adoption of Actuarial XXXIV, which prescribed specific standards for applying CARVM to variable annuity contracts with guaranteed minimum death benefits, Company acquired the computer capability to calculate CARVM reserves for its deferred variable annuity business. This was not the case, however, during the years involved in this advice request.

For the years involved, Company originally filed its returns on Form 1120L as a life insurance company subject to tax under Part I of subchapter L, section 801 et. seq. Subsequently, Company filed amended returns for the years involved, recomputing its taxable income under the provisions of Part II of subchapter L, as a non-life insurance company. For purposes of determining insurance company taxable income under section 832, Company included its separate account reserves for deferred variable annuity contracts as part of unearned premiums pursuant to the flush language of section 832(b)(4), which Company labeled "life insurance reserves included in unearned premiums under section 832(b)(7)(A)." For purposes of determining the amount of separate account reserves included in unearned premiums, Company applied the rules of section 807(d), but omitted making the adjustments required by section 817(a) to the extent that such reserves had been increased during the taxable years involved as a result of realized and unrealized appreciation in the value of the separate account assets.

On its amended returns, Company claimed that this change in tax status was mandated by the reserve ratio test of section 816(a) because more than 50 percent of its total reserves for the years involved were comprised of statutory reserves for deferred variable annuity contracts held in a separate account, which did not qualify as life insurance reserves under section 816(b)(1), although such reserves were required to be included in total reserves under section 816(c).

LAW

Section 816(a) defines a life insurance company as an insurance company whose life insurance reserves plus unearned premiums and unpaid losses (whether or not ascertained) on noncancellable accident and health insurance comprise more than 50 percent of its total reserves. For purposes of the definition of a life insurance

company, section 816(a) provides that an insurance company is "any company more than half of the business of which during the taxable year is the issuing of insurance or annuity contracts or the reinsuring of risks underwritten by insurance companies."

Section 816(b)(1) defines the term "life insurance reserves" as amounts (A) which are computed or estimated on the basis of recognized mortality or morbidity tables and assumed rates of interest; and (B) which are set aside to mature or liquidate, whether by payment or reinsurance, future unaccrued and contingent claims arising from life insurance, annuity, or noncancellable accident and health insurance contracts

involving, at the time with respect to which the reserve is computed, life, health, or accident contingencies. With exceptions not relevant here, life insurance reserves must also be required by law. Section 816(b)(2).

Section 816(c) provides that an insurance company's total reserves include (1) life insurance reserves, (2) unearned premiums and unpaid losses (whether or not ascertained) not included in life insurance reserves, and (3) all other insurance reserves required by law.

Section 816, which provides a statutory definition of a life insurance company, was enacted as part of the comprehensive revision to the life insurance company tax provisions made by the Tax Reform Act of 1984, P.L. 98-369 (1984 Act). Although the 1984 Act made a number of changes to the rules under section 816 for determining whether or not an insurance company is a life insurance company, section 816(a)(1) continues the same 50 percent reserve ratio test as found in former section 801(a)(1). In addition, the definition of life insurance reserves in section 816(b)(1) is the same as that provided in former section 801(b)(1). In general, where a provision from prior law was carried over by the 1984 Act, Congress intended the new provision to be interpreted in a manner consistent with the prior law provision. Therefore, the regulations, rulings, and case law under former section 801(b)(1) may provide interpretative guidance for purposes of determining whether Company's statutory reserves for deferred variable annuity contracts qualify as life insurance reserves under section 816(b)(1), and therefore whether or not Company is a life insurance company under 50 percent reserve ratio test under section 816(a)(1). See H.R. Rep. No. 432, 98th Cong., 2d Sess., Pt. 2, 1417 (1984); S. Prt. No. 169, 98th Cong., 2d Sess. 524 (1984).

Section 1.801-4(d)(2) provides, in part, that reserves for variable annuity contracts qualify as life insurance reserves if they otherwise satisfy the requirements of what is now section 816(b)(1).

Section 817 provides a number of special rules for variable contracts with reserves based on segregated asset accounts.

Section 817(a) provides that for purposes of determining the amount of any net decrease or net increase of reserves and other similar items during the taxable year under section 807(a) or (b), which is included in gross income, or allowed as a deduction in calculating life insurance company taxable income, the year-end balance of the reserves with respect to any variable contract shall be adjusted by (1) subtracting from such reserve the sum of the amounts added from time to time during the taxable year by reason of appreciation in value of assets (whether or not the assets have been disposed of, and (2) by adding to such reserve the sum of the amounts subtracted from time to time during the taxable year by reason of depreciation in value of assets

(whether or not the assets have been disposed of). Section 817(a) further provides that the amount of the deduction allowed under sections 805(a)(1) or (6) with respect to claims and benefits accrued, or the consideration with respect to assumption reinsurance, shall also be adjusted to the extent that the amount of these items is increased for the taxable year by appreciation or depreciation not otherwise reflected as a reserve adjustment.

Section 817(c) requires life insurance companies that issue variable contracts to separately account for various income, exclusion, deduction, asset, reserve, and other liability items properly attributable to such variable contracts."

Section 817(d) defines a "variable contract" as a contract that provides for the allocation of all or part of the amounts received under the contract to an account that, pursuant to state law or regulation, is segregated from the general asset accounts of the company and that provides for the payment of annuities, or is a life insurance contract. Section 817(d)(1) and (2). In the case of an annuity contract, the amounts paid in or paid out must reflect the investment return and market value of the segregated asset account. Section 817(d)(3)(A).

Section 817(f)(1) provides that, for purposes of determining whether reserves held with respect to variable contracts satisfy the computational requirement of section 816(b)(1)(A) to be treated as life insurance reserves, the reflection of the investment return and market values of the segregated asset account will be considered an assumed rate of interest.

ANALYSIS

The issue for which advice has been requested is whether Company's statutory reserves for deferred variable annuity contracts, consisting of reserves held in a separate account based on the aggregate cash surrender values of the underlying contracts plus, for certain years, additional reserves held in Company's general account for minimum guaranteed death benefits in excess of the amounts funded from the separate account, were amounts "computed or estimated on the basis of recognized mortality or morbidity tables or assumed rates of interest" for purposes of the definition

of life insurance reserves under section 816(b)(1), and therefore whether Company qualified as a life insurance company for Federal income tax purposes under the 50 percent reserve ratio test of section 816(a)(1).

Company takes the position that, for purposes of determining whether its statutory reserves for deferred variable annuity contracts satisfy the requirements of section 816(b)(1), it is appropriate to test the separate account reserves and the additional reserve held in the general account for minimum guaranteed death benefits separately. Company then argues that the reserves held in the separate account for its deferred variable annuity contracts did not qualify as life insurance reserves under section 816(b)(1) because these reserves were determined by reference to the current cash surrender values of the underlying contracts, and therefore, were not amounts "calculated on the basis of recognized mortality or morbidity tables and assumed interest rates," as required by section 816(b)(1)(A). Although section 817(f)(1) provides that the reflection of the market value and investment return of the segregated asset account will be treated as an assumed rate of interest for purposes of section 816(b)(1)(A), Company maintains that this special rule does not address the other requirements in section 816(b)(1), namely, the requirement that the reserve be computed using a recognized mortality or morbidity table. Because the separate account reserves were based on the current cash surrender values of the underlying contracts, and were not calculated on a tabular basis, Company argues these separate account reserves cannot be treated as qualified life insurance reserves under section 816(b)(1).

In this regard, Company points to recent court decisions which have interpreted the computational requirement in what is now section 816(b)(1)(A) to mean that, regardless of any mortality-based guarantees contained in the underlying contracts, an insurance company must actually compute its reserves for such contracts on a tabular basis using recognized mortality or morbidity tables and assumed interest rates in order for such reserves to qualify as life insurance reserves under section 816. Cf. UNUM Life Ins. Co. v. United States, 897 F.2d 599 (1st Cir. 1990). As in UNUM, Company asserts that the actual computation of the reserves should be controlling for purposes of determining whether its separate account reserves for deferred variable annuities qualify as life insurance reserves under section 816(b)(1).

The IRS examination team takes the position that Company calculated its statutory reserves for variable annuity contracts in accordance with the Commissioners Reserve Valuation Method (CARVM), which provides the minimum reserve standard for annuity contracts under Standard Valuation Law. In applying CARVM, it was necessary for Company to consider the value of all of the future guaranteed benefits potentially available under the terms of the annuity contracts, including guaranteed nonforfeiture benefits, guaranteed annuity benefits, and guaranteed death benefits. Thus, even though Company established its separate account reserves by reference to the current cash surrender values, the examination team argues that these reserves represent

amounts computed or estimated on the basis of recognized mortality tables and assumed rates of interest to the extent that, in applying the CARVM reserve methodology, Company had to make a comparative valuation of all of the guaranteed benefit streams potentially available under the terms of the contracts, including mortality-based benefits such as guaranteed annuity benefits and guaranteed death benefits.

Company disputes the IRS examination team's allegation that its separate account reserves were calculated in accordance with CARVM. In order to apply CARVM to its deferred variable annuity contracts, Company maintains that it would have been necessary to make a prospective valuation of each of the potential guaranteed benefits available under its deferred variable annuity contracts using a two-step process, in which each future guaranteed benefit stream would first would be projected using the mortality table and interest rates specified in the contract, and then converted to a present value as of the valuation date by discounting the projected benefits using the applicable valuation rate under the Standard Valuation Law. In contrast with the prospective calculations required by CARVM, Company asserts that it determined its separate account reserves based on the information regarding the current cash surrender values provided by Z, an independent administrative services company, which did not have the computer capability to generate CARVM reserves. Company also claims that if proper CARVM calculations had been made for its deferred variable annuity contracts, the resulting reserves would have been lower than the liabilities that Company actually reported on the separate account annual statement.

This office disagrees with Company's contentions that, insofar Company did not perform all of the calculations required by CARVM in establishing its separate account reserves, but instead determined such reserves by reference to the current cash surrender values on the underlying annuity contracts, it necessarily follows that Company's separate account reserves were not based on CARVM, and therefore did not involve amounts calculated on the basis of recognized mortality or morbidity tables and assumed interest rates, as required by section 816(b)(1)(A).

In order for Company's statutory reserves for deferred variable annuity contracts to satisfy minimum state law reserve requirements, Company could not simply establish such reserves based on the current cash surrender values. Rather, Company first had to determine that the current cash surrender values were at least equal to the minimum formula reserves required for its deferred variable annuity contracts under the Standard Valuation Law, that is, the reserves required by CARVM. As discussed more fully below, in making this determination, Company analyzed all of the guaranteed benefits provided by the variable annuity contracts, including guaranteed nonforfeiture benefits and guaranteed annuitization benefits, in order to determine the extent to which the reserve required by CARVM to fund those benefits was greater, or less than, the current cash surrender values. Company also considered the extent to which the current cash surrender values would cover the risks associated with the variable annuity contract's

minimum guaranteed death benefit provision. Thus, although Company established statutory reserves for its deferred variable annuity contracts by reference to the current cash surrender values of the underlying contracts, and for certain taxable years also established additional reserves in the general account for minimum guaranteed death benefits in excess of the amounts that could be funded by its separate account reserves, this office believes that these statutory reserves were calculated on the basis

of recognized mortality tables and assumed rates of interest to the extent that, in establishing its statutory reserves, Company had to analyze the extent to which the current cash surrender values were equal to, or less than, the minimum formula reserves required under CARVM to fund all of the future guaranteed benefits provided by the variable annuity contracts.

Just as Company necessarily had to compute or estimate a CARVM reserve in order to determine the extent to which its statutory reserves determined by reference to the current cash surrender values were at least equal to the minimum reserve standard under the Standard Valuation Law required to fund all of guaranteed benefits potentially available under its deferred annuity contracts, Company also relied on the CARVM reserve methodology in order to hold statutory reserves for its deferred annuity contracts that were less than the carrying value of the separate account assets, and thereby to accrue surplus attributable to the separate account that could be used to offset the strain resulting from the requirement to charge off the policy acquisition costs incurred with respect to its deferred variable annuity business.

In general, the accounting rules applicable to the variable contracts would seem to preclude the recognition of surplus attributable to the separate account because, under both state law and the rules contained in section 817, all of the investment income and market appreciation or depreciation of the separate account assets must be credited to, or charged against, the benefits provided under the variable contracts based on such account, other than certain contractual expense charges taken from the separate account's investment earnings from time to time to cover the insurance company's mortality guarantees, investment management services, and administrative expenses. If a life insurance company calculates the minimum formula reserves for a variable annuity contract based on CARVM, however, the calculated reserve may be less than the carrying value of the separate account assets. This result occurs because, in computing future guaranteed nonforfeiture values, CARVM generally permits future nonforfeiture values to be reduced by contractual surrender charges available to the insurer (other than certain contingent surrender charges where the insurer waives such charges on transfers among investment options). See Actuarial Guideline XIII. Therefore, separate account surplus may be generated through the use of the CARVM reserve methodology, since the valuation of future guaranteed nonforfeiture benefits under CARVM takes into account available surrender charges, thus resulting in a minimum formula reserve that is less than the current market value of

the separate account assets. In recognition of this potential surplus generated by the CARVM reserve methodology, the NAIC annual statement used to record activity in the separate account specifically requires that any surplus generated as the result of the insurance company's reserve method must be reported in the general account as an unsettled transfer from the separate account, thereby ensuring that as the contractual surrender charges diminish over time, there are sufficient assets in the separate account to cover the increase in the related reserve liability. See National Association

of Insurance Commissioners, 2 Accounting Practices and Procedure Manual, IP 89-02 (2002 ed.).

In this case, Company prepared its annual statements in accordance with this NAIC accounting guidance, accruing surplus based on the difference between the carrying value of the separate account assets and its statutory reserves for the deferred variable annuity contracts, which was reported by the general account as an unsettled transfer from the separate account. Because the underlying authority for this NAIC accounting treatment is based on an insurance company's use of the CARVM reserve methodology, Company's accrual of surplus on its NAIC annual statement based on this difference between the carrying value of the separate account assets and the separate account liabilities maintained for its deferred variable annuity contracts demonstrates Company's reliance on the CARVM reserve methodology, even though Company's separate account reserves were set equal to the current cash surrender values.

Company argues that its separate account reserves were not calculated in accordance with CARVM because, as a factual matter, Company established such reserves based on the current cash surrender values of the underlying contracts, and therefore did not perform the separate calculations required by the CARVM reserve methodology. Company's submission acknowledges, however, that its actuary did perform hypothetical CARVM calculations in order to demonstrate that its statutory reserves satisfied the minimum reserve requirements of the Standard Valuation Law.

Company's argument that the separate account reserves for its deferred variable annuity contracts were not computed in accordance with CARVM because it did not perform all of the calculations required by the CARVM methodology is not persuasive. While a literal application of CARVM would seem to require an insurance company to individually value each guaranteed benefit at each future duration, actuaries have recognized that, in applying CARVM, it is often possible to determine in advance which benefit stream will have the highest present value, thus eliminating the calculation of all but a few benefits. See Tullis and Polkinghorn, Valuation of Life Insurance Liabilities, 68 (3d ed., 1996). Actuaries have also recognized that depending on the prospective interest guarantees and scale of surrender charges provided in a deferred annuity contract, it is possible to design the contract such that its current cash surrender value will always exceed the CARVM reserve. See Jay Jaffe, The Application of the

Commissioners Annuity Reserve Valuation Method to Fixed Single Premium Deferred Annuities in Transactions of the Society of Actuaries, XXXIV, 107-08 (1982).

CARVM was adopted as the minimum reserve standard for annuity contracts as part of the 1976 amendments to the Standard Valuation Law. The development of CARVM was spurred by the growing sales by the life insurance industry of deferred annuity contracts that had been designed to serve as cash accumulation vehicles through the crediting of current interest rates, rather than to guarantee a stream of

retirement income. As a sales inducement for these products, many life insurance companies began offering deferred annuity contracts which guaranteed high rates of return for a number of future years, provided the contracts remained in force and withdrawals were not taken. In response to these product developments, the CARVM reserve methodology was introduced to ensure that life insurance companies maintained adequate reserves to fund any current and future interest and annuitization guarantees provided by the deferred annuity contracts.

One of the principles regarding the practical application of CARVM to deferred annuity contracts, however, is that it is often possible to exclude the valuation of future annuitization benefits from the calculation of the future benefit component of the reserve calculation. More specifically, if the annuity purchase rate guarantees are less favorable than the reserve valuation interest rate, and if the cash surrender value is used to purchase the annuity option at the time of election by the contractholder, then the future annuitization benefits will never enter into the CARVM calculation because the present value of those future annuity payments will always be less than the cash surrender value at the date of annuitization. Tullis and Polkinghorn, Valuation of Life Insurance Liabilities, 93.

This principle clearly applied with respect to Company's deferred variable annuity contracts. Although the calculation of the CARVM reserve nominally requires that "[t]he future guaranteed benefits shall be determined by using the mortality table, if any, and the interest rate, or rates, specified in the contracts for determining guaranteed benefits," Company's actuary recognized that such calculation would not affect the required statutory reserve, as the value of the future annuitization benefits would always be less than the current cash surrender value. Thus, in a 1993 memorandum discussing the impact of Actuarial Guideline XXXIII on Company's statutory reserves for its deferred variable annuity block of business, Company's actuary wrote:

> If we look at annuitizations, we have guaranteed fixed payout rates which are priced at an interest rate of a % and don't guarantee any current rates will be used. Guideline 33 allows us to discount these future payments at the SPIA valuation interest rate which is current b % (and further discount this to the current valuation date at the deferred annuity valuation interest rate if annuitization is assumed to occur in the future). These calculations always

> produce a present value that is significantly below the current cash surrender value when we apply the accumulation value to purchase the annuity. We also guarantee a variable payout annuity with an assumed investment return of c % but there are no guaranteed returns to project at. If we project at a rate that is the discount rate less the asset based fees there is a constant spread of d % between the projection rate and the discount rate. Again, the present value of these payments is less than the current cash surrender value. Therefore, the cash surrender value is sufficient.

A second principle regarding the practical application of CARVM to deferred annuities is that, once the actuary has determined that the CARVM reserve will be based on guaranteed nonforfeiture benefits, it is often possible to determine the duration at which those guaranteed nonforfeiture benefits will have the greatest present value. In a seminal 1982 paper regarding the application of CARVM to deferred annuities, a leading actuary described this principle as follows:

> For policies with surrender charges, if the combined effect of the guaranteed interest rate plus the reduction in the surrender charge exceeds the valuation interest rate for *n* years, then the greatest present value will occur by discounting the cash value at the end of the *nth* contract year. If the combined effect of the guaranteed rate and the reduction of the surrender charge is sometimes greater and other times less than the valuation interest rate in an alternating fashion, then it will be necessary to discount the cash value at many points to find which has the greatest present value.

Jay Jaffe, The Application of the Commissioners Annuity Reserve Valuation Method to Fixed Single Premium Deferred Annuities in Transactions of the Society of Actuaries, XXXIV, 105 (1982).

When applying CARVM to variable annuity contracts, the issue arises regarding what interest rate to use when projecting a contract's future guaranteed nonforfeiture benefits in the reserve calculation because variable contracts do not guarantee an interest rate as such, but instead provide nonforfeiture values based on the investment returns and market values of the specific groups of assets selected by the contractholder to support the contract, with the contractholder assuming the related investment risk. One of the primary objectives underlying the CARVM reserve methodology, however, is to ensure that the insurance company maintains adequate reserves to fund any prospective interest guarantees in excess of the valuation interest rate. Therefore, as deferred variable annuity contracts typically do not provide a future interest guarantee, an accepted method of applying CARVM to a variable annuity contract when calculating future guaranteed nonforfeiture benefits is to assume a guaranteed interest rate equal to the valuation interest rate, reduced by any contractual expense charges assessed against investment earnings credited to the contractholder, such as the mortality and expense charge and other asset related charges. See Tullis

and Polkinghorn, Valuation of Life Insurance Liabilities, 99. If this assumption is used, an actuary may design the variable annuity contract such that the current cash surrender value will always exceed the CARVM reserve by simply providing, in the scale of surrender charges, that the reduction of the surrender charge for any contract year (which operationally increases the interest rate to be credited to the contractholder's nonforfeiture value for that year) is not greater than the insurance company's asset based charges for that year, such that the effective interest rate used

to project the future guaranteed nonforfeiture benefits never exceeds the valuation interest rate used to discount the future guaranteed nonforfetiure benefits to the valuation date.

In this case, although Company did not perform a prospective calculation of future nonforfeiture benefits using the CARVM methodology, Company was able to apply the above principles to determine that the present value of the future nonforfeiture benefits provided by its deferred variable annuities would never exceed the current cash surrender value. As Company's actuary explained in an internal memorandum:

> For statutory valuation of [Company's] variable deferred annuity, the Commissioners Annuity Reserve Valuation Method (CARVM) is prescribed. This method mandates that we look at present values of future guaranteed benefits but variable products have no investment income guarantees. For CARVM calculation purposes I have projected policyholder [nonforfeiture] benefits at an interest rate equal to "the valuation rate, less all contractual asset based charges" as recommended in the "Valuation of Life Insurance Liabilities" book by Tullis and Polkinghorn…
>
> The 1993 maximum valuation interest rate for an annuity with cash settlement options, no future interest guarantees, a guaranteed duration of 5 years or less, and plan type "C" is 5.75%. The contractual asset-based fees include a M&E charge of e %, an administrative charge of f % and investment management fees which vary by fund and calendar year. In the first half of 1993 these investment fees have ranged by fund from g % to h % with an average of about i %%. These fees should never go below j % unless renegotiated. Totalling all of the asset based fees gives us a k % versus the valuation rate resulting in a "guaranteed" interest rate of l % with which to project policyholder benefits.
>
> The attached chart represents the CARVM calculations for a sample … policy with a $10,000 deposit. It can be seen that the greatest present value of benefits at any duration will be the current cash surrender value of the policy under these assumptions. This is exactly what we intend to hold as the statutory reserve (excluding any additional reserves required for the guaranteed death benefit or other miscellaneous reserves).

Company argues that its separate account reserves for deferred variable annuity contracts were not computed in accordance with CARVM because such reserves exceeded the reserves that would be required by CARVM to provide for future nonforfeiture benefits. Due to the manner in which guaranteed future benefits are defined under CARVM, the calculated reserve at the end of any contract year can never by less than the current cash surrender value. As a theoretical matter, however, the CARVM reserve methodology for valuing future guaranteed nonforfeiture benefits may

produce a reserve that is less than the current cash surrender value if the valuation date falls between policy anniversaries. For example, if the accumulation rate used to project guaranteed nonforfeiture values to the next policy anniversary date is less than the reserve valuation rate, discounting the accumulated nonforfeiture value back to the valuation date using the higher valuation rate will produce a reserve that is less than the current cash surrender value. As a practical matter, however, actuaries have recognized that if CARVM results in a reserve which is less than the current cash surrender value, it is necessary to modify the reserve calculation such that the calculated reserve equals the current cash surrender value. This is because Exhibit 8G of the life and health annual statement requires that the total reserve held for an annuity contract can never be less than its cash surrender value. See Jay Jaffe, The Application of the Commissioners Annuity Reserve Valuation Method to Fixed Single Premium Deferred Annuities and related discussion in Transactions of the Society of Actuaries, XXXIV, 140 (1982); Tullis and Polkinghorn, Valuation of Life Insurance Liabilities, 84.

Company established separate account reserves based on the cash surrender values of the underlying variable annuity contracts because Company recognized that such cash surrender values exceeded the minimum formula reserves required by CARVM to fund the guaranteed nonforfeiture and annuitization benefits provided by the contracts, and because Company recognized that minimum state law reserve requirements would not permit it to establish a reserve for a deferred variable annuity contract that was less than its current cash surrender value. Accordingly, even if the excess of the current cash surrender value over the reserves required by CARVM were disregarded as an amount added to satisfy minimum state law reserve requirements, and not an amount calculated on a tabular basis as required by section 816(b)(1)(A), Company's separate account reserves, to the extent of the reserves required by CARVM, were amounts computed or estimated on the basis of recognized mortality tables and assumed interest rates because Company could not establish such reserves based on the current cash surrender values without first determining that those cash surrender values were at least equal to the reserves required by CARVM to fund the guaranteed nonforfeiture benefits and guaranteed annuitization benefits provided in the deferred variable annuity contracts.

Company contends that its separate account reserves do not qualify as life insurance reserves under section 816(b)(1) based on the standard used by the First Circuit in UNUM v, United States. In UNUM, the court held that the Company's liabilities for certain deposit administration contracts issued to pension plans to fund future retiree benefits were not life insurance reserves under the computational requirement of what is now section 816(b)(1)(A) because the Company did not actually calculate those contract liabilities using recognized mortality tables and assumed interest rates. The court rejected the government's position that solely because the deposit administration contracts contained permanent annuity purchase rate guarantees, the liabilities recorded for the contracts should be viewed as life insurance reserves because they reflected amounts held with respect to a mortality risk. Rejecting that argument, the court stated:

> It cannot be, however, that the mere existence of a risk, the precise measurement of which requires one to look at mortality tables, can make the amount giving rise to the risk a "life insurance reserve" within the meaning of the Code. For one thing, that is not what the Code says. The relevant provision, I.R.C. § 801(b)(1)(A) defines "life insurance reserves" solely in terms of how a company, *in fact,* computes a particular "amount." It refers to "amounts… which are computed or estimated on the basis of recognized mortality … tables." I.R.C. § 801(b)(1). It does not speak of "amounts" that "might be," or, "in principle, could be" or, for "greatest accuracy ought to be, " computed in that way. (897 F.2d at 607).

Company contends that, under the standard adopted by the First Circuit in UNUM, life insurance reserves under section 816(b)(1) only include those reserves that are in fact computed or estimated on the basis of recognized mortality tables, with the result that its separate account reserves would not so qualify because these amounts were based on the current cash surrender values rather than a tabular computation.

This office believes that Company's statutory reserves for deferred variable annuity contracts are clearly distinguishable from the deposit administration liabilities addressed in UNUM. Although deposit administration contracts may be drawn upon to purchase retirement annuities at guaranteed rates when employees retire in the future, these contracts operate as unallocated deposit funds during the accumulation period. As a result, even though the insurance company may assume a mortality risk with respect to the annuity purchase rate guarantee provided under a deposit administration contract, it is difficult for an actuary to quantify this risk using a recognized mortality table during the contract's accumulation period because of the uncertainty regarding the number and timing of retirement annuities to be issued in the future, as well as the mortality characteristics of the individuals receiving such annuities (age at retirement, sex, etc.). Given these measurement difficulties, the insurance regulators in Maine, UNUM's state of domicile, did not require deposit administration contract liabilities to be calculated through reference to mortality tables. Also, because the deposit

administration contracts were issued to qualified pension plans, these contracts were not subject to CARVM reserve requirements, even though they contained permanent annuity purchase guarantees.

The court in UNUM took note of a number of contractual differences between individual deferred annuity contracts and deposit administration contracts, which supported its conclusion that the taxpayer's liabilities with respect to group pension plan contracts were not calculated in accordance with the requirements of what is now

section 816(b)(1)(A). Due to these contractual differences, the court observed that the taxpayer "did not calculate its liability under its 'deposit administration contracts' in the way that companies normally calculate their liability under annuity contracts." 897 F.2d at 605.

This office believes that the court's analysis of the reserve computational issue in UNUM does not carry over when testing the qualification of Company's statutory reserves for deferred annuity contracts under section 816(b)(1)(A). Unlike the situation in UNUM, Company's statutory reserves for deferred variable annuity contracts were required to comply with the minimum reserve standard provided by CARVM, which specifically mandates that "[t]he future guaranteed benefits shall be determined by using the mortality table, if any, and the interest rate, or rates, specified in such contracts for determining minimum guaranteed benefits." Therefore, even if Company's statutory reserves for deferred variable annuity contracts bore a superficial resemblance to the deposit administration liabilities addressed in UNUM insofar as Company established liabilities in the separate account based on the current cash surrender values of the underlying contracts, there was a fundamental difference in the measurement of those liabilities. This is because, in establishing its statutory reserves for deferred variable annuity contracts, Company was required to determine the extent to which the current cash surrender values were equal to, or less than, the minimum reserves required by CARVM to fund all of the future guaranteed benefits provided by the contracts, including annuitization benefits and guaranteed death benefits. Therefore, Company's statutory reserves for deferred variable annuity contracts, to the extent of the reserves required by CARVM, were amounts "computed or estimated on the basis of recognized mortality or morbidity tables and assumed rates of interest," and thus qualified as life insurance reserves under section 816(b)(1).

CAVEATS

A copy of this technical advice memorandum is to be given to the taxpayer that is the subject of this request. Section 6110(k)(3) of the Code provides that it may not be used or cited as precedent.